

drug treatment treatment, polytherapy, low mean seizure free interval, male gender, presence of ADR and high mean duration of disease are significantly ($P < 0.05$) associated with low HRQoL scores. **CONCLUSIONS:** Epilepsy has a negative impact on their HRQoL. The determinants found by this study will help in framing different strategies to improve patient's compliance and their HRQoL.

PND49

THE IMPACT OF HERPES ZOSTER ON ABSENTEEISM AND QUALITY OF LIFE AMONG IMMUNOCOMPROMISED PATIENTS

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OBJECTIVES: Little evidence exists on the impact of herpes zoster (HZ) on quality of life (QoL) and work absenteeism for immunocompromised patients. This study describes work absenteeism, and loss in quality of life due to HZ among immunocompromised individuals in the United States, UK, Canada, France and Germany. **METHODS:** A web-based survey was conducted with adult males and females who: 1) had cancer or stem cell transplant (SCT) and HZ (HZ and cancer group); 2) cancer or SCT without HZ (cancer group); and 3) had neither cancer, SCT or HZ (immunocompetent group). Validated measures included the Brief Pain Inventory (BPI), activities of daily living (ADL), the EQ-5D-5L, and the World Health Organization Health and Work Performance Questionnaire (WHO HPQ) for work absenteeism. Multivariable logistic regressions controlling for demographic characteristics and comorbidities examined the impact of HZ on the EQ-5D-5L score and absenteeism relative to the cancer and immunocompetent groups. **RESULTS:** Overall, there were 353 respondents with HZ (HZ and cancer group), 351 with cancer only, and 353 were immunocompetent. HZ patients had average pain scores that were at least 2 and 3 points greater ($p < 0.001$) than the cancer and immunocompetent groups, respectively. Across all ADLs, HZ patients scored 4 and 5 points higher ($p < 0.001$) than the cancer and immunocompetent groups, respectively. HZ patients had 2 and 20 more hours of absenteeism than the cancer and immunocompetent ($p = 0.06$) groups; and scored 0.5 and 7.3 points lower on the EQ-5D-5L than the cancer and immunocompetent ($p = 0.01$) groups. **CONCLUSIONS:** HZ respondents had greater pain, more absenteeism and lower EQ-5D-5L scores than those without HZ. Despite the differences between the HZ and cancer groups on ADLs and pain, these groups reported similar scores on the EQ-5D-5L, suggesting the EQ-5D-5L may not be sensitive enough to capture the impact of HZ.

NEUROLOGICAL DISORDERS – Health Care Use & Policy Studies

PND50

TRIPTAN USE AND ASSOCIATED HEALTH CARE UTILIZATION AND COSTS IN ADULTS WITH MIGRAINES

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OBJECTIVES: Triptans have been used widely as acute treatments for migraine. This study aimed to determine distinct characteristics of triptan users and non-users, identify socioeconomic-related factors associated with triptan use, define migraine utilization patterns and ascertain differences in cost between triptan and non triptan users in migraine patients. **METHODS:** This study used the Medical Expenditure Panel Survey (MEPS) household component files for panels 11-14 (years 2006-2010). Subjects who had a migraine diagnosis and were 18 years or older were included in the sample. Triptan users were identified from prescribed medicines files. Predictors associated with triptan use in migraineurs were assessed by multivariate logistic regression. Health care expenses (per person per year) including medical care and prescription drug expenses were measured from the payer perspective. The association between health expenses and triptan use was examined by multivariate linear regression. **RESULTS:** We identified 1,644 eligible subjects in our study, representing 36.7 million individuals during 2006-2010 in the United States. Nearly 30% of the subjects received triptans to treat migraine. The triptan users were more likely to be women, white and have college degrees than non-users. The subjects receiving triptans had higher total numbers of office visits and prescription drug fills but lower number of emergency department visits than those not. The triptan expense accounted for 47% of migraine-related expenses in one year. After adjustment, triptan users showed 26% higher total all-cause health care expenses than non-users. **CONCLUSIONS:** Socioeconomic factors such as gender, race, education and income levels might influence triptan use in migraineurs. Triptan treatment impacts on migraine-related expenses and is associated with increased total health care expenses in subjects with migraine.

PND51

TREATMENT DYNAMICS AND DISEASE BURDEN AMONG PATIENTS WITH RELAPSING REMITTING MULTIPLE SCLEROSIS (RRMS) CURRENTLY TREATED WITH DISEASE MODIFYING TREATMENTS (DMTs) IN THE UNITED STATES

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OBJECTIVES: To assess treatment dynamics and disease burden among RRMS patients currently treated with DMTs in the US. **METHODS:** A multi-center medical chart-review study of MS patients was conducted in 4Q2012 among neurologists to collect de-identified data. Neurologists were screened for duration of practice (> 3 yrs) and patient volume (> 15 MS patients/month) and recruited from a large panel to be geographically representative of the US. Medical charts of next 10 consecutive MS patients were abstracted by each neurologist to collect patient diagnosis, treatment patterns and symptomatology/disability-status. RRMS patients currently treated with 1st-line & 2nd-line DMTs were evaluated. **RESULTS:** 708 RRMS

patient charts were identified (mean age: 41.2yrs; female:67%; currently treated with DMTs: 601(85%); discontinued DMTs in past 3 months: 35(5%); DMT-naive: 35(10%). Of the 601 currently treated patients, current line of DMT: 1st-line-62%, 2nd-line-28%, $> 3^{\text{rd}}$ -line-10%. 1st-line patient characteristics included- mean age:40.0yrs; female:69%; average time-to-initiation of DMT from diagnosis:7.5mo; time on current 1st-line DMT:51.5months; JCV status: positive-1%/negative-7%/don't know-8%/not tested-84%. Top-4 reason for 1st-line DMT initiation: efficacy against relapses(25%), efficacy in early MS(25%), efficacy in slowing disease progression(18%), patient decision(12%). Mean EDSS-score:1.65; current disability (per-physician-judgment): mild-81%/moderate-17%/severe-2.2%. 2nd-line DMT patient characteristics included- mean age:42.8yrs; female:66%; average time-to-initiation of DMT from diagnosis:3.7mo; time on current 2nd-line DMT:31.2months; JCV status: positive-14%/negative-26%/don't know-8%/not tested-52%. Top-4 reason for choosing the 2nd-line DMT: efficacy against relapses(34%), efficacy in slowing disease progression(34%), patient decision(8%), tolerability(7%); correspondingly, top-4 reasons for switch from 1st-line DMTs were: lack of efficacy(38%), relapse(24%), flu-like symptoms(17%), injection-site reactions(11%). Mean EDSS-score:2.98; current disability (per-physician-judgment): mild-50%/moderate-44%/severe-7%. **CONCLUSIONS:** In this cohort, RRMS patients on 2nd-line DMT appear to have higher disease burden compared to those on 1st-line DMT. Time-to-initiation of first DMT after diagnosis differed significantly between these two groups. Further research is warranted to scrutinize the observed treatment patterns and treatment sequencing strategies to alleviate patient burden.

PND52

THE GROWING CHALLENGE OF MANAGING AGE-RELATED DISEASES IN CHINA: EXAMPLE OF ALZHEIMER'S DISEASE

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OBJECTIVES: Due to a rapidly aging population, age-related diseases, such as Alzheimer's disease (AD), are becoming a great concern in China. The objective of this study was to provide an overview of the future socio-economic issues raised by the increasing prevalence of AD in China. **METHODS:** A literature review was done to collect information on the disease management, the demographic projections, and medical capabilities available in China. To answer the questions that emerged from the literature review, five clinical experts and two hospital administrative payers were interviewed. **RESULTS:** It was estimated that there were 10 million cases of AD in China in 2010. As a typical aging disease, the burden of AD in China is substantial and will continue growing as the elderly population grows. Around 33% of the Chinese population is expected to be older than 60 in 2050, representing 438 million people. A large imbalance was found between AD management needs and availability of health care services for AD patients, as a result of: 1> Chinese culture values family care for the elderly, while the single-child policy resulting in 4 grand-parents and 2 parents being cared for by one child, 2> extremely poor awareness of AD in China both publicly and privately (assimilated as dementia), and 3> limited medical capabilities for AD. As a result, it is predicted that working-age Chinese population will have to take time to provide informal care for the elderly, leading to an important impact on the productivity. **CONCLUSIONS:** Results suggest China is an emerging market for AD treatments. There is a large imbalance between AD management needs and capabilities to provide it in China.

PND53

DRUG EXPENSES FOR ALZHEIMER'S DISEASE IN BRAZIL: A DESCRIPTIVE ANALYSIS

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OBJECTIVES: The Brazilian public health system (SUS) provides donepezil, rivastigmine and galantamine for all individuals with Alzheimer's disease (AD). The Ministry of Health (MoH) is responsible for the acquisition of rivastigmine and donepezil, whereas the States are responsible for the acquisition of galantamine, reimbursed by MoH. The aim of this study is to characterize patients with AD and the financial resources employed by the MoH. **METHODS:** Descriptive analysis of the profile of patients and drug expenses, based on data about the amount dispensed and values reimbursed by the MoH in 2012, available in the database of the SUS (current values; exchange rate: US\$ 1 = R\$ 2.36). Were considered: a) MoH expenses with central acquisition of donepezil and rivastigmine and b) values of galantamine reimbursement. **RESULTS:** In 2012, 119,378 patients with AD were treated with medicines in the SUS. These patients had a mean age of 78.57 years and 65.87% were women. Most of them was treated with rivastigmine (42.98%), followed by donepezil (39.07%) and galantamine (17.95%). The annual costs per patient with galantamine were 17 times higher than donepezil (US\$ 1,045.07 with galantamine, US\$ 439.78 with rivastigmine and US\$ 61.47 with donepezil). The MoH expenses in this period with these drugs summed up to US\$ 14,176,227.12. This amount represented 0.73% of the total MoH's budget of high-cost drugs in 2012. The biggest expenses occurred with rivastigmine (76.16%), followed by donepezil (12.09%) and galantamine (11.74%). **CONCLUSIONS:** Despite the higher cost of treatment with galantamine, the impact with rivastigmine was greater because it is the most common drug. The central acquisition of drugs results in lower treatment cost due to its scale economy and the public development partnerships results, a strategy aimed to strengthen the health industrial complex, the resource optimization and the access to medicines.

PND54

REIMBURSEMENT BASED ECONOMICS: AN APPLICATION TO TRIPTANS FOR MIGRAINE THERAPY

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